

## 华西南银莲花属研究随记

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**摘要:** 在本文中将短柱银莲花 (于 2004 年被归并于毛果银莲花)、凉山银莲花和鲁甸银莲花 (二种于 2001 年被降级作为匙叶银莲花的二变种) 的种级地位予以恢复; 描述了自我国西南部发现的银莲花属 2 新变种 (直柱凉山银莲花和宽叶湿地银莲花), 并给出其等的特征纪要。

**关键词:** 毛茛科; 银莲花属; 种级的恢复; 新分类群; 华西南

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## Notes on the Genus *Anemone* (Ranunculaceae) of Southwest China

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**Abstract:** The specific statuses of *Anemone brevistyla*, which was reduced into the synonymy of *A. baicalensis* in 2004, *A. liangshanica* and *A. lutenensis*, which were both relegated to varietal rank under *A. trullifolia* in 2001, are restored. Besides, two varieties, *A. liangshanica* var. *rectistyla* and *A. rupestris* var. *latifolia*, are described as new from Southwest China, and their diagnoses are given.

**Key words:** Ranunculaceae; *Anemone*; Restoration of specific status; New varieties; Southwest China

### *Anemone* L.

#### Sect. 1. *Stolonifera* (Ulbr.) Juz.

1. *Anemone brevistyla* Chang ex W. T. Wang in Acta Phytotax. Sin. **12** (2): 162, pl. **2**: 4-6. 1974; et in Fl. Reip. Pop. Sin. **28**: 16, pl. **3**: 4-6. 1980; W. T. Wang, Ziman & Dutton in Z. Y. Wu & P. H. Raven, Fl. China **6**: 318. 2001. Type: Sichuan; Tianquan, 1936, K. L. Chü 2419 (holotype and isotype, PE). Fig. 1: A-C

*A. baicalensis* auct. non Turcz.; Ziman et al. in J. Jap. Bot. **79** (5): 294. 2004, p. p. quoad syn. *A. brevistyla* Chang ex W. T. Wang.

Distribution: Endemic to western Sichuan (Tianquan, Luding and Dujiangyan)

Additional specimens examined: Sichuan: Lu-

ding Xian, Moxi, Yangliupe, alt. 2 280 m, fls. white, 1983-05-30, Veget. Group. Inst. Biol. Chengdu 30824 (PE); Dujiangyan Shi, Anonymous 960073 (PE).

Sect. *Stolonifera* is characterized by sessile involucre bracts, filiform filaments, pantocolpate pollen grains and carpels with sessile or subsessile capitate stigmas (Xi and Chang, 1964; Wang, 1980; Tamura, 1995). However, in a member of this section, *Anemone brevistyla*, the carpels in structure are similar to those of many species belonging to Sect. *Anemonanthea*, having subulate styles and lacking stigmas. In the nineteen seventies after describing this new species, on the basis of its primitive carpel morphology I had surmised that *A. brevistyla* might

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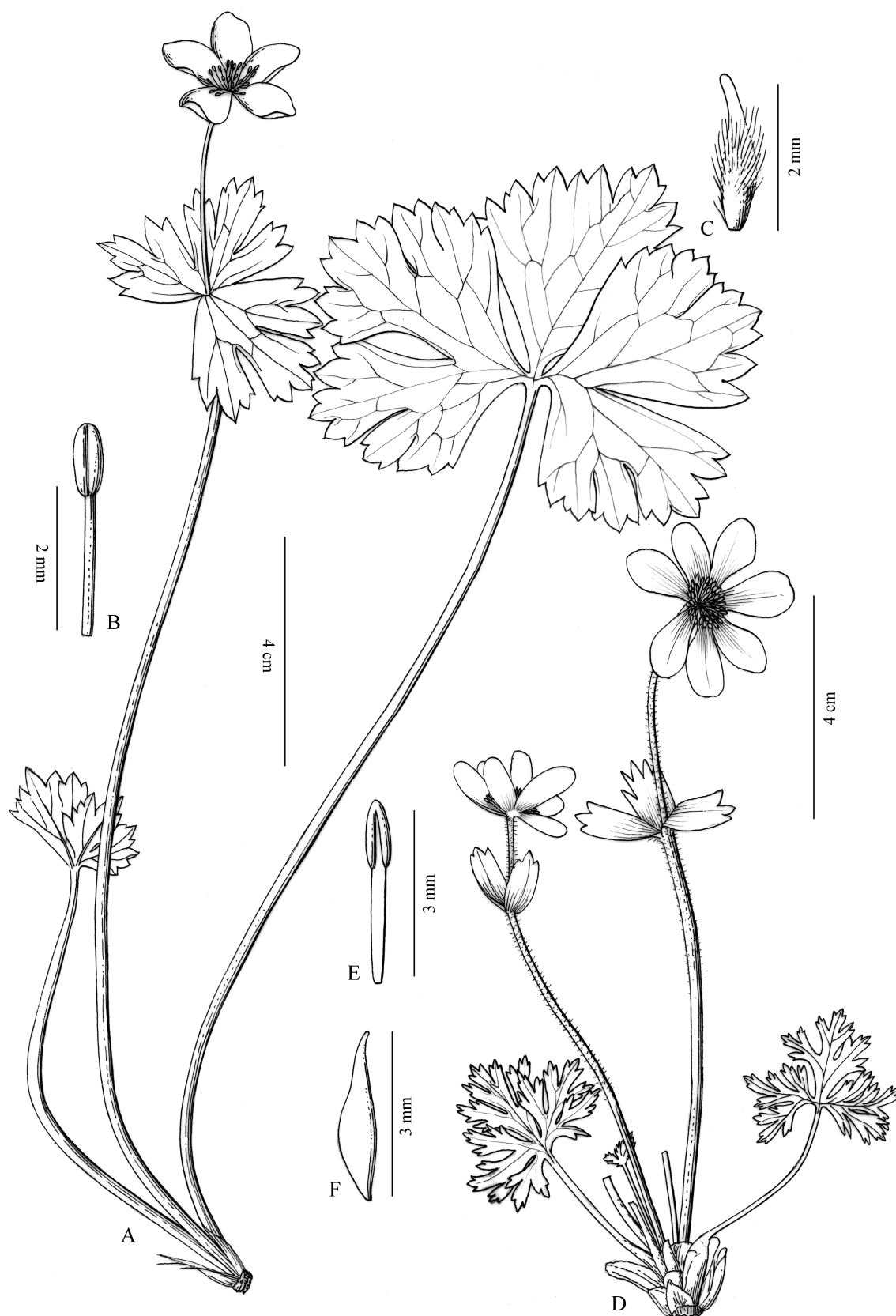


Fig. 1 A-C. *Anemone brevistyla* A. habit; B. stamen; C. carpel (from isotype);  
D-E. *A. rupestris* var. *latifolia* D. habit; E. stamen; F. carpel (from holotype)

be the primitive species of Sect. *Stolonifera*, and placed this species at the beginning position of that section in Flora Reipublicae Popularis Sinicae. (Wang, 1980) Afterwards in 2004, to my surprise, *Anemone brevistyla* was reduced to the synonymy of *A. baicalensis* (Ziman *et al.*, 2004). In fact, *A. baicalensis* obviously differs from *A. brevistyla* in its spreading-pubescent petioles and scapes, and in its carpels with subsessile capitate or globose stigmas. In *A. brevistyla*, the petioles and scapes are sparsely appressed-pubescent, and the carpels, as mentioned above, have subulate styles and lack stigmas. Basing the distinct morphological differences just mentioned, I would restore the specific status of *Anemone brevistyla* here.

Sect. 2. Himalayicae (Ulbr.) Juz.

2. ***Anemone liangshanica*** W. T. Wang in Acta Phytotax. Sin. **12** (2): 170, pl. **9**: 11. 1974; et in Fl. Reip. Pop. Sin. **28**: 44, pl. **10**: 8–10. 1980. —*A. trullifolia* Hook. f. & Thoms. var. *liangshanica* (W. T. Wang) Ziman & Dutton in Z. Y. Wu & P. H. Raven, Fl. China **6**: 324. 2001; Ziman *et al.* in Edinb. J. Bot. **64** (1): 78, fig. 8. 2007, syn. nov. Type: Sichuan Province: Leibo Xian, Liangshan, Huangmogeng, alt. 2 800 m, 1959–06–19, C. C. Hu *et al.* 761 (holotype and isotype, PE), 813 (paratype, PE).

2a. var. ***liangshanica*** Fig. 2: A–C

Staminum filamenta lineari-lanceolata. Gynoecium ex carpellis 25 constans, stylis ovariis paulo brevioribus apice recurvatis.

Distribution: Endemic to Leibo Xian, Sichuan

2b. var. ***rectistyla*** W. T. Wang, var. nov. Fig. 2: D–F. Type: Yunnan Province: **Dali Shi**, Xizhou, Huadianba, alt. 2 900 m, alpine meadow, fls. white, with purple spots, 2009–07–17, X. H. Jin, Bing Liu, Bo Liu, X. Quan, J. X. Su & Y. Zhong 1594 (**holotype**, PE).

Staminum filamenta linearia. Gynoecium ex carpellis 5 constans, stylis ovariis 2-plo brevioribus rectis.

This variety differs from var. *liangshanica* in its linear filaments and in its styles being 2 times shorter than ovaries and straight. In var. *liangshanica*, the filaments are linear-lanceolate, and the styles are slightly shorter than ovaries and recurved at apex.

*Anemone liangshanica*, which was relegated to varietal rank under *A. trullifolia* in 2001, obviously differs from the latter in its spatulate, 3-parted basal leaves, and in its white sepals lacking anastomosing veins. In *A. trullifolia*, the basal leaves are broadly rhombic or rhombic-obovate in outline, 3-lobed, and the sepals are yellow in colour and have anastomosing veins (Wang, 1980; Ziman *et al.*, 2007). With the distinct morphological differences just mentioned the specific status of *Anemone liangshanica* should be restored.

3. ***Anemone lutienensis*** W. T. Wang in Acta Phytotax. Sin. **12** (2): 172, pl. **5**: 12–14, pl. **10**: 13. 1974; in Fl. Reip. Pop. Sin. **28**: 44, pl. **12**: 12–14. 1980; in W. T. Wang *et al.* Vasc. Pl. Hengduan Mount. **1**: 514, 1993; et in C. Y. Wu, Fl. Yunnan. **11**: 198, pl. **57**: 16–18. 2000. —*A. trullifolia* Hook. f. & Thoms. var. *lutienensis* (W. T. Wang) Ziman & Dutton in Z. Y. Wu & P. H. Raven, Fl. China **6**: 324. 2001; Ziman *et al.* in Edinb. J. Bot. **64** (1): 79, fig. 9. 2007, syn. nov. Type: Yunnan Province: Lijiang Shi, Ludian, 1939–05–28, R. C. Ching 20548 (holotype, PE), 20550 (paratype, PE). Fig. 2: G–I.

Distribution: Endemic to Ludian, Lijiang Shi, Yunnan.

*Anemone lutienensis*, which was together with *A. liangshanica* relegated to varietal rank under *A. trullifolia* in 2001, also obviously differs from the latter in its long, not winged petioles and its subglabrous, 3-parted leaf blades, and in its white or blue sepals lacking anastomosing veins. In *A. trullifolia*, the basal leaves have short, winged petioles and densely villous, 3-lobed blades, and the sepals are yellow in colour and have anastomosing veins (Wang, 1980; Ziman *et al.*, 2007). With the distinct morphological differences just mentioned the specific status of *Anemone lutienensis* should be reinstated.

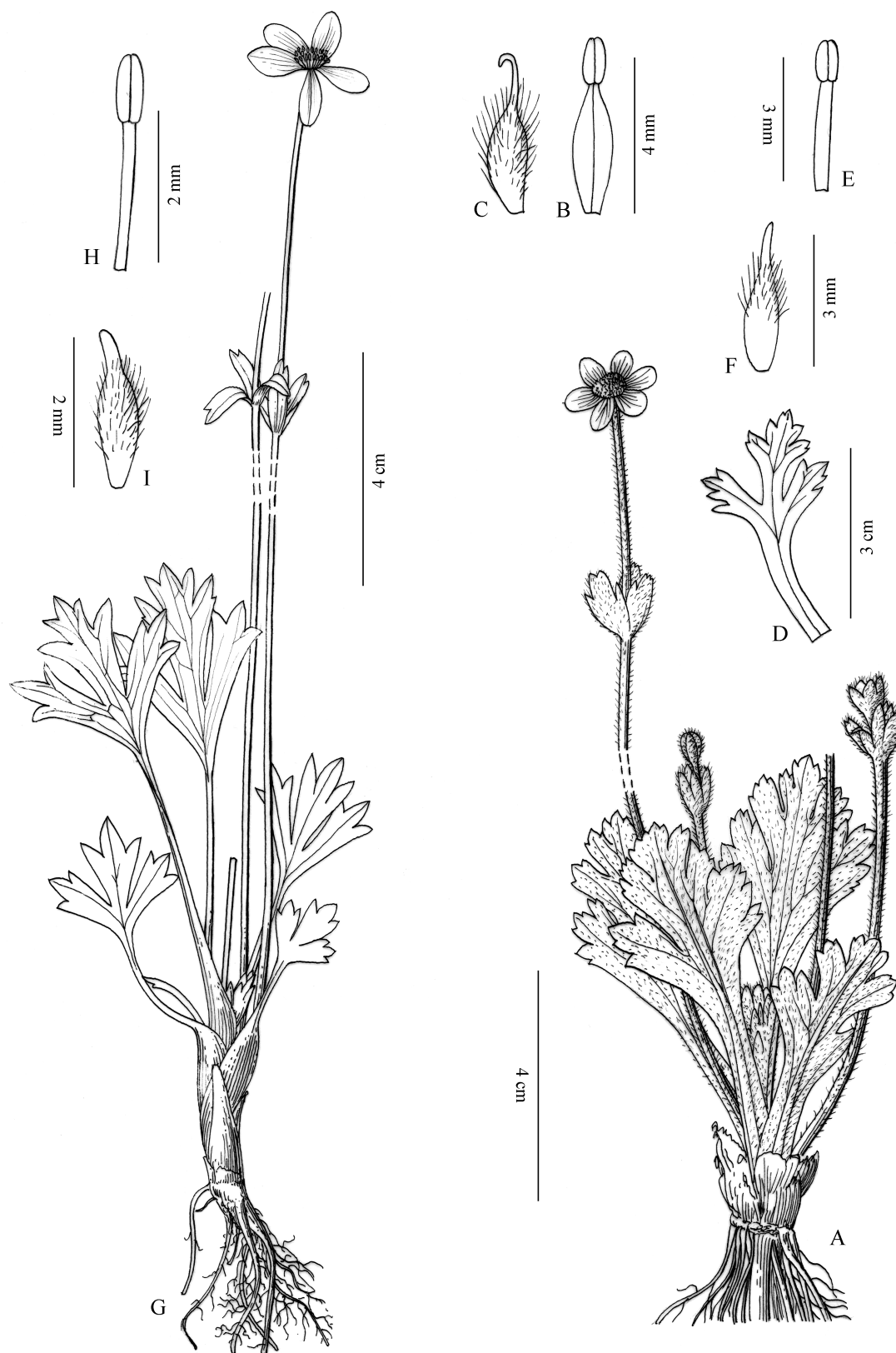


Fig. 2 A-C. *Anemone liangshanica* var. *liangshanica* A. habit; B. stamen; C. carpel (after Wang, 1980).

D-F. *A. liangshanica* var. *rectistyla* D. basal leaf; E. stamen; F. carpel (from holotype).

G-I. *A. lutiensis* G. habit; H. stamen; I. carpel (from paratype)

4. *Anemone rupestris* Wall. ex Hook. f. & Thoms. var. **latifolia** W. T. Wang, var. nov. Fig. 1: D–E. Type: Sichuan Province: **Dayi Xian**, Heshuihe Nature Reserve, alt. 3 200 m, in forests, fls. white, 2007–06–06, D. H. Zhu, Z. B. Feng, C. Zhang & F. Wang 20070626 (**holotype**, PE).

A var. *rupestri* differt foliorum basalium laminis pentagonis, flore sepalis 7 praedito.

This variety differs from var. *rupestris* in its pentagonal blades of basal leaves and in its flower with 7 sepals. In var. *rupestris*, the blades of basal leaves are triangular-ovate in outline, and the flower usually has 5, rarely 7 sepals.

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